TITLE OF THE THESIS : Does Cleistanthin A modulate proton currents of human neutrophils in the presence of ATP?

DEPARTMENT : Physiology

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OBJECTIVES :

To study the effect of Cleistanthin A on voltage gated proton channels of human neutrophils, with ATP included in the patch pipette.

METHODS :

- Isolation of fresh human neutrophils
- Isolation of Cleistanthin A
- Recording proton currents in isolated neutrophils by Patch Clamp technique
- Analysis of the percentage of proton currents remaining after the addition of the test and control solutions in comparison to currents recorded before addition

RESULTS :

When the proton currents recorded at different voltage-clamp levels, after the addition of either Cleistanthin A (test) or ethanol (control), were expressed as percentages of the pre-intervention currents at the same voltages, there was no statistically significant difference in the percentage current remaining after intervention in both groups.

The results indicate that even in the presence of ATP, Cleistanthin A does not show any significant effect on voltage gated proton channels of human neutrophils.

Key words : Cleistanthin A, ATP, Proton channels, Neutrophils